

**Notice of Allowability**

Application No.

10/611,966

Examiner

Rodney E. Fuller

Applicant(s)

SHIGEMATSU ET AL.

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's Response to Quayle Action, dated December 9, 2005.
2. ☒ The allowed claim(s) is/are 1-46.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**Rodney Fuller**  
**Primary Examiner**



## DETAILED ACTION

### *Remarks*

It appears that the body of the Ex Parte Quayle Action, mailed November 30, 2005, was not scanned into the record or sent to the applicant.

The Specification and Drawings were objected to in the previous Office Action because of the following items (*from previous Office Action*):

A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because every page of the specification, including the abstract and claims, includes a printer artifact that would potentially cause errors when the patent is published.

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because every page of the drawings includes a printer artifact that would potentially cause errors when the patent is published.

Sample pages from the Specification and Drawings were to be provided to the applicant in the last Office Action as examples of the artifact.

It appears that only the Office Action Summary page was mailed to the applicant on November 30, 2005. In response, the applicant provided formal drawings as replacement sheets. Further, it appears that the Office was able to scan the text of the Specification without errors due to the artifact. Thus, the examiner withdraws the objections to the Specification and Drawings set forth in the Office Action mailed November 30, 2005.

***Information Disclosure Statement (from previous Office Action)***

1. The references cited by applicant and listed on the European Search Report as an X-reference (WO 0033138, US 6,333,781, EP 1 129 138 and WO 02/31870) have been considered. The cited references do not disclose the subject matter currently claimed in the present application.

***Allowable Subject Matter (from previous Office Action)***

2. Claims 1-46 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The prior art does not specifically set forth the limitations wherein the projection optical system satisfies the conditions below:

- a. (Claims 1 and 41):  $(\lambda \times L) / (NA \times Y_o^2) < 1.5 \times 10^{-3}$
- b. (Claims 22 and 43):  $(\lambda \times L) / (NA \times Y_o^2) < 1.0 \times 10^{-3}$  and  $\lambda < 200\text{nm}$
- c. (Claims 28 and 45):  $0.14 < Y_o / L < 0.030$

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion (from previous Office Action)***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Omura (US 6,864,961) and Suzuki (US 6,862,078) each disclose a projection optical system that is substantially telecentric on the first and second object side.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851



June 2, 2006



Approved  
PT 6-2-c6

**Fig.1**

